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REPORT AND RECOMMENDATION  
OF THE  
PRESIDENT  
TO THE  
EXECUTIVE DIRECTORS  
ON A  
PROPOSED LOAN  
TO  
THE REPUBLIC OF KOREA  
FOR A  
FOURTH RAILROAD PROJECT

November 2, 1972

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CURRENCY EQUIVALENTS

Currency Unit           = Won

U. S. \$1.00           = Won 400

Won 1,000           = U. S. \$2.50

Won 1,000,000       = U. S. \$2,500

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT  
TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO  
THE REPUBLIC OF KOREA FOR A FOURTH RAILROAD PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Korea for the equivalent of US\$40 million to help finance a project for the Korean National Railroad (KNR). The proceeds of the loan would be lent to the KNR for 25 years, including 4 years of grace, with interest at  $7\frac{1}{2}$  percent per annum.

PART I - THE ECONOMY

2. Korea's commendable performance in economic development during the 1960's was reviewed in the last economic report (EAP-25a dated September 13, 1971). It noted that rapid industrialization and a phenomenal growth of exports had been the main engines of growth in Korea's economic development in the 1960's, and made possible a real GNP growth rate of more than 11 percent a year. The report also pointed out, however, that this rapid growth had been accompanied by ever-increasing dependence on imports, widening balance of payments deficits and large foreign capital inflows, as well as continuous inflation. Unrestrained continuation of the past pattern of growth would thus have given rise to difficulties in the balance of payments and serious problems in external debt management.

3. The recent economic mission, whose report is being prepared now, indicates that the government's efforts towards establishing a more moderate and stable growth pattern and improving the external payments position, as postulated in the government's Third Five-Year Economic Development Plan (1972-76), have begun to take effect. The growth rates of both output and investment have slowed down markedly since the middle of 1971, partly as a result of the government's stabilization policy and partly due to business uncertainty relating to international monetary instability, the United States' curb on textile imports from East Asian countries, and an economic slowdown in Japan, Korea's second largest trade partner. In the first seven months of 1972, exports expanded again at an annual rate exceeding 40 percent, but there is as yet no corresponding recovery in industrial production for the domestic market or in industrial investment. As a result, GNP growth in 1972 may be less than 8 percent.

4. The prospects for continued rapid expansion of industrial exports and further import substitution now seem somewhat better than a year ago. A surge in exports in the first half of this year is an indication of the improved international competitiveness of Korean producers, partly as a result of the Won devaluation of more than 26 percent in the past 18 months and the revaluation of the Yen, but also

because of the adaptability of Korean exporters to changing market conditions. Import substitution seems likely to gain new momentum in the coming few years in response to the government's incentive policies and in part as a result of recent investments in the iron and steel and petrochemical industries.

5. In recent months, the government made two important policy decisions: one to deal more decisively with price inflation and the widespread financial difficulties of industrial firms, and the other to give greater emphasis to agricultural development, and consequently to permit a more equitable distribution of development gains.

6. In August, the government announced a stabilization policy package which included: an austere budget for 1973 and continued monetary restraint in order to keep economic expansion at a moderate pace; and firmer price controls, which together with a more stable exchange rate, a "freeze" on public utility rates, and smaller increase in government support prices of foodgrains are meant to eliminate cost-push factors. To alleviate financial difficulties of industrial firms with predominantly short-term, high cost domestic debts as well as large foreign debts, the government took measures to consolidate domestic loans into longer-term, low cost finance. It also established an Industrial Rationalization Fund as a means whereby the government can assist particularly distressed firms, on a selective basis, to reorganize, modernize, and improve their capital structure. The policy package is a bold but well thought-out attempt to break the inflation psychology that in recent years has been part of the Korean economic scene, while preventing the financial difficulties of firms from disrupting further industrial development.

7. On the agricultural side, the government decided to launch a comprehensive rural development program, called the New Community Movement. The Third Five-Year Plan already proposed increased investment in agriculture beyond the levels of earlier plans; the new program as now envisaged represents further expansion and acceleration of agricultural investment programs for eight purposes: expansion of irrigation facilities; comprehensive water-shed development; comprehensive slope-land development; paddy rearrangement; farm modernization; marketing improvement and expansion of processing facilities; rural electrification; and the establishment of rural sanitary and clinical facilities. To accommodate the increase in agricultural investment and also to avoid conflicts between the expanded investment program and the stabilization objective, some scaling down of other parts of the Third Plan investment, and external resources additional to those called for in the Plan, are likely to be needed. The government is currently contemplating partial cuts in the transportation sector. This and added stress in agricultural investment is in line with the Third Plan strategy and with general policy recommendations offered in recent Bank economic reports.

8. Taking the proposed revision of the Plan into account, the external borrowing requirements can be expected to remain within manageable limits, although they will be particularly large in the next two years, and are projected to amount to \$900 million a year. The debt service ratio, now about 21 percent, should remain near that level and then gradually decline after a few years, if the government keeps GNP growth down to about 8.5 percent per annum. Korea has the capacity to sustain further debt, if service is projected on a mixture of soft and conventional terms. However, the current balance of payments situation and Korea's still low per capita income (about US \$276) make it appropriate for some of the assistance it receives from the Bank Group to be on IDA terms, and I expect to propose some IDA lending later this fiscal year. Also, in spite of a commendable savings effort, there remains a gap between savings and investment, which cannot be entirely covered by financing the foreign currency component of high priority projects. In these circumstances some local expenditure financing is appropriate.

## PART II - BANK GROUP OPERATIONS IN KOREA

9. Korea has received seven Bank loans amounting to US \$227.5 million and also seven IDA credits amounting to \$87.0 million, taking into account cancellations and the refinancing of one IDA credit in a subsequent Bank loan. The proposed loan would bring total Bank Group lending to Korea to \$354.5 million.

10. Of the \$314.5 million total Bank Group lending in the past, \$134.2 million has been for the transport sector - \$79.7 million for railways and \$54.5 million for highways. The Korea Development Finance Corporation has received \$55 million in Bank loans for relending to private industry. \$110.5 million has gone to agricultural projects and the balance of \$14.8 million to the education sector.

11. This would be the fourth Bank Group project with KNR. A \$14 million IDA credit was made in 1962 and another of \$10.7 million in 1967. A joint loan and credit of \$55 million total was extended in 1970. The first two credits, which financed mainly rolling stock, have been fully disbursed. The third project was to finance locomotives, rolling stock and equipment needed for the 1967-71 development program of KNR. On the whole, the execution of these projects has been satisfactory and KNR has maintained a high level of operational efficiency.

12. Of total Bank Group lending, \$187.8 million remained undisbursed as of September 30, 1972. This large amount is mainly attributable to the fact that withdrawals under several of the large loans made within the past two years are starting only now. A mission is now in Korea to appraise a second education project (up to \$50 million). Other FY 1973 lending operations for ports (\$40 million or more) and KDFC (\$35 million) are almost ready for appraisal. One other project may also be ready for consideration in mid-1973: The Pohang Steel Mill Expansion, for which we received in October a request for financing in association with other lenders.

13. IFC has made four investments in Korea and its holdings amount to US\$8.1 million in loans and shares. IFC made its first equity investment to KDFC, of \$0.7 million or 14 percent of KDFC's paid-in capital, at the time when the Bank made its first loan to KDFC. The latest investment of IFC, in 1971, was a purchase of \$0.6 million of the shares of the Korean Investment and Finance Corporation - a new institution whose function is to assist in the development of the capital and money markets. Prospects for further IFC investments in Korea are good. Annex I contains a summary statement of Bank loans, IDA credits and IFC investments as of September 1972 and notes on the execution of on-going projects.

### PART III - TRANSPORT SECTOR

14. The Bank's knowledge of the Korean transport sector is good with regard to the main characteristics of the sector, traffic developments during the past ten years, principal projects carried out and their financing, and future investment plans and requirements. Historically, the railways and, to a lesser extent, coastal shipping, have been the two major modes of transportation in Korea. The railways continue to handle the bulk of freight traffic but there has also been a large expansion in coastal traffic.

15. The preponderance of the railways in freight traffic and the general economic role of the railways, are based in large part on location patterns. Domestic natural resources, e.g., coal, iron ore and limestone, are located in the north, northeast and center of the country and require heavy bulk transport to the industrial areas, mainly located in and around Seoul-Incheon and Pusan. Thus, about 85 percent of rail freight traffic consists of bulk commodities, with an average length of haul of 240 kms. This factor of location makes movement by rail the most economical means of transportation for a large proportion of the total movement of commodities.

16. In addition, during recent years the capacity of the railways has been substantially expanded while improvements of the road network have been relatively neglected, with the exception of limited access expressways (see paragraph 17 below). Restrictions on importation of vehicles severely limited the number of available trucks until 1967 when domestic assembly was started, and kept down expansion of the road vehicle fleet. Thus the railways have been in a better position than the roads to handle the increased demand for freight transport.

17. Most roads are badly aligned, narrow, poorly drained and either roughly surfaced with gravel or unsurfaced; only 10 percent of the total network is paved. In line with the recommendations of the 1965 Bank-financed Transport Survey and of Bank economic missions, the government

has greatly increased the allocations for highway construction since 1968. However, a large part of these funds was allocated to the construction of two toll expressways (Seoul-Pusan, 428 km, and Seoul-Incheon, 29.5 km), of which the Seoul-Pusan was economically premature in many sections. This resulted in a shortage of funds for improvement and maintenance of the existing roads and also diverted passenger traffic from the railways on the Seoul-Pusan route. Road transport also has captured the bulk of the increase in passenger traffic throughout Korea.

18. The large expansion in coastal shipping and the major role it has now assumed in total freight traffic (30 percent of the total in 1970) reflect in part factors of location, in part the construction of port facilities for specific industrial complexes and in part the shortage of rail and road capacity. The major commodities carried by coastal shipping are oil, cement and coal.

19. There has been a large expansion in port capacity which, however, is still insufficient, due to the rapid growth of port traffic, with the result that bottlenecks and congestion have been experienced in the major ports. There has been a tendency to spread expenditures among various ports, and this has no doubt reduced the effectiveness of the investments made. Another development has been the construction of specialized ports intended to serve a number of complexes, e.g., Pohang, Ulsan and Masan.

20. As in other countries, one of the objectives of transport policy has been the attainment of greater self-sufficiency in merchant shipping. Although investments were made by the private sector, the bulk of investments has been channelled through government financial institutions at low interest rates. About 24 percent of total foreign trade tonnage has been carried by Korean vessels during recent years.

21. Air transport remains comparatively unimportant. The privately-owned Korean Air Lines (KAL) provides domestic and some international flights. Most traffic is handled at the Seoul-Kimpo International Airport.

22. The Bank's lending program and strategy in the transport sector concentrate on helping to overcome the shortcomings of the transport system while also attacking certain problems in the sector. A major sector-wide problem is the need for improvement in transport planning and coordination. Substantive issues relating to investment planning, and important policy measures, do not receive adequate attention. Part of the problem has been that transport coordination has not received sufficient support from senior government officials. The Bank has made a major effort over the past few years to convince the government of the need for proper planning and coordination which might mean some reorganization of the agencies which should be doing the overall planning. In the meantime, areas which could be improved within the

present framework are taken up under this project. The Loan Agreement (Section 4.06) provides for a review of the functions and work program of the Transport Planning Office (TPO) in the Ministry of Transportation, including: the collection and preparation of data relating to costs and operation of all modes of transport; action to ensure that all relevant government agencies will furnish to TPO all major investment proposals; and the strengthening of economic expertise in the TPO.

23. The Bank is active in helping the government attack the problems of the road system. The first highway project, which is being executed satisfactorily, includes financing for feasibility and detailed engineering studies for sections of national highways, and a study of the organization of highway maintenance, a major problem. These studies will be used as a basis for formulating future highway projects. Preparation of the second highway project is well advanced and an appraisal mission is scheduled for the first quarter of calendar 1973. The allocation of investment priority among national highways and provincial roads, and between major realignments of roads and the paving of already existing alignments, is another serious problem. The government recognizes the need to give more emphasis to the paving of existing alignments as opposed to concentrating on major realignments; to this end, the government is preparing a paving program for national highways, some of which may be included in the proposed Second Highway Project. Government also recognizes the need to improve some provincial roads and has indicated that it intends to identify and prepare such work for consideration by the Bank for financing under a future highway project.

24. The Bank has been executing agency for a UNDP port development study which has identified a ports project which should be ready for lending in FY 1973. The key issues in this sub-sector are the need for a proper cost accounting system and higher port charges to ensure the financial viability of ports, and the need for a new port organization having responsibility for both planning and operation.

25. In the railroad sub-sector the major problem is the need to improve the financial position of KNR. This problem, and details of Bank Group involvement in the Korean railway system, are dealt with in the paragraphs below.

#### PART IV - THE PROJECT

26. In October 1971, the government approached the Bank for financial assistance for KNR. The Bank identified this project, which was appraised in December 1971. Negotiations for the proposed loan were held in Washington between September 15 and September 29, 1972. The government was represented by Messrs: Hong, Myun Hoo - Planning Coordinator (KNR); Wei, Sung Yong - Chief, First Loan Division, Economic Planning Board and Ahn, Chang Hwa - Chief, Overall Planning Office (KNR).



27. KNR's investment plan for the 1972-76 period has been thoroughly reviewed by and discussed with the Bank, and calls for an outlay of about US\$340 million equivalent with a foreign exchange component of \$181 million. The project is KNR's 1972-74 investment plan totalling \$265 million with a foreign exchange component of about \$157 million, of which \$40 million would be covered by the proposed loan. Another \$15 million in foreign exchange will be disbursed in this period from the Third Railway Project (loan/credit 669/183 KO). Of the remaining foreign exchange requirement, \$49 million will be provided by a consortium of European manufacturers, \$35 million by a Japanese yen credit, about \$6 million from KfW Germany, and the government is expected to contribute about \$12 million.

28. The proposed project includes: the completion of the already started electrification of industrial lines; electrification of KNR lines in the Seoul suburban areas as part of the rapid transit project for the Seoul Metropolitan area; construction of a new link from the second Incheon port to an existing railway line; installation of centralized traffic control in the Seoul area; improvement of marshaling yards and freight handling facilities; complete track and rail renewals; bridge strengthening; procurement of track maintenance and renewal equipment; purchase of passenger and freight cars; improvement of facilities for repair of motive power and rolling stock; and installation of some telecommunications facilities.

29. The project costs are based on latest prices and are reasonable. Contingency provision has been made on the basis of price increases of 6 percent per annum for local costs and 4 percent per annum for foreign currency costs. Price contingencies now represent about 7.5 percent of total project costs.

30. All goods to be financed by the proposed loan would be procured through international competitive bidding. Local manufacturers are expected to participate in the bidding for bridge girders, and possibly for ordinary passenger cars. Local firms have capability and experience in the fabrication of bridge girders, but there are no Korean firms with previous experience in the manufacture of passenger cars. KNR will select local firms to be permitted to bid for passenger cars after a proper prequalification procedure established in consultation with the Bank. If Korean firms are permitted to bid and are successful in winning these contracts, a total of up to \$8 million to finance local currency expenditures could be disbursed from the proceeds of the proposed loan. For the purpose of bid evaluation, local bidders be given a preference margin of 15 percent or the level of customs duties, whichever is lower. The current customs duties are 40 percent for bridge girders and zero for passenger cars.

31. KNR was reorganized in 1963, in accordance with a law required under the Credit Agreement for the Second Railroad Project, as a semi-autonomous agency within the government with an independent manager and its own budget and accounting system. The government exercises control

over KNR in staff, financial and budgetary matters.

32. The management of KNR is generally satisfactory and the efficiency of operations is high. Maintenance of property and equipment is satisfactory to date. KNR lacks senior qualified engineering, economic and accounting staff in relation to the size and complexity of the Korean railway system. Until this deficiency can be remedied, KNR will have to rely on consultants for certain activities; during the execution of this project these will include consultants for the electrification of KNR lines in the Seoul suburban area, provision of telecommunications facilities and accounting improvements.

33. Until recently, KNR kept two sets of accounts: commercial accounts providing management information, and accounts set up according to the traditional system providing for expenditure control by the government. As agreed under Credit 183-KO, the government authorised KNR to abandon the government form of accounting from January 1971 and to maintain its accounts and financial statements solely in accordance with commercial accounting practices. KNR's progress in implementing the system is slow. KNR and the Bank discussed ways to further improve the system during negotiations. It was agreed that KNR would employ the accounting consultants mentioned in paragraph 32, and that a time-phased program for implementing the system would be established. Training of selected KNR operational and engineering staff is currently under way and is satisfactory.

34. KNR's most serious problem since approval of the Third Railroad project has been financial. KNR enjoyed significant increases of net operating revenue during 1967-69, and at the time of appraisal of the third project in 1969, the prospects for further improvement appeared good; however, this proved to be too optimistic and the rate of return declined so that there was a small operating deficit in 1971, rather than the rate of return of 7 percent specified in Credit 183-KO. The main causes were: (i) a decrease in passenger traffic during 1970 and 1971, largely because of the opening of the four-lane Seoul-Pusan Expressway on which imported air-conditioned buses have been under operation since 1970; (ii) a relatively slow growth of freight traffic partly due to KNR's shortage of motive power and rolling stock; and (iii) general increases in prices and staff costs not compensated for by freight tariff adjustments. To improve the situation, the government authorized KNR to increase its freight tariffs by an average of 20 percent from February 1972. This should help KNR to earn a small operating surplus in 1972 but will not improve KNR's finances sufficiently.

35. The questions of appropriate financial targets for KNR and tariff adjustments needed to improve its finances were discussed with KNR and the government during negotiations. It was agreed that the objective should be for KNR to generate funds adequate to cover fully

its operating expenditure and debt service obligations and finance a reasonable part of its investment needs including replacement. In KNR's present situation regarding investment needs, debt position, etc., as projected over the next few years, a rate of return of about 5 percent would be adequate to meet this objective; however, it would not be realistic to expect to achieve this target immediately. Consequently it was agreed (Section 4.07 of the Loan Agreement) that KNR would progressively improve its position and achieve a rate of return of at least 2 percent on its net fixed assets in use by 1975, 3 percent by 1976 and 5 percent by 1978. A specific program of measures to be taken after 1973 has been agreed, including passenger and freight increases by specific dates in 1974, 1975 and 1976, and cost reduction measures. In view of the stabilization program described in paragraph 6 above, especially the freeze on public utility rates, it was agreed that rail tariff increases would not be implemented in 1973, but it also was agreed that if there is any relaxation in these economic measures, an increase in railway tariffs in 1973 will be given priority.

36. During this transitional period, KNR will need financial assistance from the government in order to meet all of its obligations, and the government has agreed to provide all necessary funds.

37. The Investment Plan and the proposed project have been found to be technically and economically justified and an assessment of the investment plan indicates an economic rate of return of about 20 percent.

#### PART V - LEGAL INSTRUMENTS AND AUTHORITY

38. The draft Loan Agreement between the Republic of Korea and the Bank, the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement and the text of a Resolution approving the proposed loan, are being distributed to the Executive Directors separately. The Loan Agreement follows the pattern of Bank agreements for loans of this kind.

39. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

#### PART VI - RECOMMENDATION

40. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara

Attachments  
November 2, 1972

THE STATUS OF BANK GROUP OPERATIONS IN THE REPUBLIC OF KOREA

A. STATEMENT OF BANK LOANS AND IDA CREDITS  
(as of September 30, 1972)

Loan or Credit Number	Year	Borrower	Purpose	US \$ million		
				Amount (less cancellations)		
				Bank	IDA	Undisbursed
25	1962	Republic of Korea	Railway		14.0	-
110	1967	Republic of Korea	Railway		10.7	-
529	1968	KDFC	Dev. Fin. Co.	5.0		-
600	1969	ADC	Irrigation	45.0		37.1
151	1969	Republic of Korea	Education		14.8	13.2
622	1969	KDFC	Dev. Fin. Co.	20.0		4.1
669	1970	Republic of Korea	Railway	40.0		6.7
183	1970	Republic of Korea	Railway		15.0	0.1
234	1971	Republic of Korea	Livestock		7.0	5.8
735	1971	KDFC	Dev. Fin. Co.	30.0		19.1
769	1971	Republic of Korea	Highway	54.5		43.3
283	1972	Republic of Korea	Irrigation		15.0	15.0
795	1972	Republic of Korea	Irrigation	33.0		32.9
335	1972	Republic of Korea	Agricultural Credit		10.5	10.5
Total				227.5	87.0	187.8
of which has been repaid				0.9	-	
Total now outstanding				226.6	87.0	
Amount sold				1.5	-	
Total now held by Bank and IDA				225.1	87.0	
Total undisbursed				143.2	144.6	187.8

B. STATEMENT OF IFC INVESTMENTS  
(as at September 30, 1972)

Year	Obligor	Type of Business	Amount in US\$ million		
			Loan	Equity	Total
1968	KDFC	Development financing	-	0.7	0.7
1969	Honam Silk Co.	Textiles	1.4	0.3	1.7
1970	Atlas Paper Co.	Pulp & paper	4.5	0.5	5.0
1971	Korea Investment & Finance Corp.	Money & Capital markets	-	0.6	0.6
Total committed			5.9	2.1	8.0
Undisbursed			5.1	1.2	6.3

## TRANSPORTATION

Third Railroad Project (Loan/Credit 669/183, Signed in May 1970). Disbursements are now proceeding satisfactorily. Other developments relating to KNR are discussed in the body of this report.

First Highways Project (Loan 769, Signed in June 1971) This project is progressing satisfactorily and is discussed in greater detail in the body of this report. All construction contracts have now been let and no significant delays are expected.

## AGRICULTURE

Pyongtaek-Kumgang Irrigation Project (Loan 600, Signed in May 1969). The original borrower was dissolved shortly after the loan was signed and replaced by the Agricultural Development Corporation. It also took longer than expected to employ consultants. The project fell about a year behind schedule, but is now well under way and may be completed within the original timetable; however, this year, the government has not provided adequate local finance and if this continues in 1973 the project could be delayed again. The same situation applies to the Yong San Gang project (see below). A supervision mission now in the field is discussing the budgetary position of these two projects, and ways to improve it, with the government.

Yong San Gang Irrigation Project (Loan/Credit 795/283), Signed in February 1972). This project is getting under way satisfactorily although there may be a future problem if the government is not able to solve the problem of providing adequate funds in the budget (see Pyongtaek-Kumgang project, above).

Integrated Dairy Beef Development Project (Credit 234, Signed in February 1971). Physically, this project is progressing well but the beneficiary has a financial problem. Under the Second Subsidiary Loan Agreement between the government, the Agriculture and Fishery Development Corporation (AFDC) and the Korea Dairy Beef Company (KDBC) required in the Credit Agreement, the government's contribution to the project should be on-lent to KDBC by AFDC. However, because of an argument about interest rates KDBC has not yet been provided with the agreed funds and this is hindering the efficiency of KDBC's operation. A further complication is the fact the KDBC bears a foreign exchange risk and the Won has been devalued about 30 percent since the appraisal in April 1970. On August 22, 1972, we requested that the government propose a solution to this problem by the end of October and a supervision mission visited Korea in September to discuss the problem. KDBC and the government are now studying the situation and the government has said it will meet the deadline for proposing a solution.

Agricultural Credit Project (Credit 335, Signed in September 1972). The Executive Directors approved this project on May 16, 1972. Approval was conditional, subject to the availability of IDA funds. The Credit documents were signed on September 29, 1972.

EDUCATION

First Education Project (Credit 151, Signed in June 1969). After initial delays in organizing the project implementation unit the project is now progressing satisfactorily. Bids for all schools have been received and awards are being made.

INDUSTRY

Second and Third KDFC Projects (Loans 622 and 735, Signed in June 1969 and May 1971). These loans are progressing satisfactorily. The Second project funds are fully committed. Commitments under the Third loan have been slowed somewhat by conditions described in the Economic Section of this report, but under present trends, it is expected that KDFC will need additional commitment authority by August of next year and thus a loan in FY 1973 is projected.

COUNTRY DATA - KOREA

AREA:  
98,477 km<sup>2</sup>

POPULATION:  
31.85 million (1971)  
Rate of Growth: 1.6% (1971)

DENSITY:  
309 per km<sup>2</sup> (1971)

POPULATION CHARACTERISTICS:

Crude Birth Rate (per 1,000): 28.0 (1971)  
Crude Death Rate (per 1,000): 8.0  
Infant Mortality (per 1,000 live births): ..

INCOME DISTRIBUTION: <sup>b/</sup>

% of national income, lowest quintile: 8  
highest quintile: 43

ACCESS TO PIPED WATER:

..

NUTRITION:

Calorie intake as % of requirements: ..  
Per capita protein intake: ..

HEALTH: (1969)

Population per physician: 1,236  
Population per hospital bed: 1,914

DISTRIBUTION OF LAND OWNERSHIP: <sup>a/</sup>

% owned by top 10% of owners: 24.3%  
% owned by smallest 10% of owners: 1.5%

ACCESS TO ELECTRICITY:

% of population - urban: ..  
- rural: ..

EDUCATION:

Adult literacy rate % (1970): 85%  
Primary school enrollment % (1970): 96.9%

GNP PER CAPITA: 280 (US \$, 1971) <sup>c/</sup>

<u>GROSS NATIONAL PRODUCT IN 1971 (\$1 : 351 Won)</u> <sup>d/</sup>			<u>ANNUAL GROWTH RATE (% constant prices)</u> <sup>e/</sup>		
	\$	%	1960-65	1965-70	1971
GNP at market prices	8792	100.0	5.8	11.3	9.8
Gross investment	2299	26.1	15.3	33.2	6.3
Gross National Savings	1291	14.7	151.5	46.1	8.9
Current Account Balance	- 1011	-11.4	20.1	38.0	26.1
Exports of Goods, NFS	1464	16.7	24.0	37.6	10.1
Imports of Goods, NFS	2467	28.1	8.7	31.0	11.0

OUTPUT, LABOR FORCE AND  
PRODUCTIVITY (1971):

	<u>Value Added</u>		<u>Labor Force</u>		<u>Value Added per Worker</u>	
	(US\$ million)	%	(million)	%	(US \$)	%
Agriculture	2558	29.1	4.71	48.5	543	60
Industry (Mining and Manufacturing)	1954	22.2	1.38	14.2	1,416	156
Services & Other	4279	48.7	3.62	37.3	1,182	131
	8792	100.0	9.71	100.0	905	100

PUBLIC FINANCES (W billion)

	<u>All Governments</u>		<u>Central Government</u>	
	1971	% of GNP	1971	% of GNP
Current Receipts	606.0	19.5	522.7	16.8
Current Expenditures	387.4	12.4	255.8	8.4
Capital Receipts	137.9	4.4	85.6	2.7
Capital Expenditures	272.6	8.7	141.6	4.7
External Assistance (net)	72.2	2.3	20.0	0.6

<sup>a/</sup> Data based on acreage cultivated by farm households. Data on ownership are not available.

<sup>b/</sup> Rough synthetic estimates based on urban and farm household surveys in 1970 and 1971.

<sup>c/</sup> Based on the World Bank "Atlas" methodology. US \$276 per capita on the basis of the current exchange rate.

<sup>d/</sup> Based on B.O.K.'s monthly average data for 1971.

<sup>e/</sup> 1965 prices.

COUNTRY DATA - KOREA

<u>MONEY, CREDIT and PRICES</u>	<u>1965</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>June 1971</u>	<u>June 1972</u>
		(Billion won outstanding end period)				
Money and Quasi Money	97.1	670.7	890.8	1037.6	968.1	1181.0
Bank Credit to Public Sector	15.7	3.4	- 13.5	- 24.5	- 49.7	- 41.4
Bank Credit to Private Sector	78.6	640.6	861.1	1124.4	983.4	1272.5
		(Percentages or Index Numbers)				
Money and Quasi Money as % of GDP	12.2	33.2	35.2	34.5	..	..
General Price Index (1963=100) <sup>g/</sup>	148.2	197.8	216.0	234.6	229.4	269.3
Annual Percentage Changes in:						
General Price Index	10.0	6.8	9.1	8.6	6.4	17.4
Bank credit to Public Sector	110.0	-53.0	- 397.0	- 83.0	- 59.8	16.7
Bank credit to Private Sector	4.8	46.7	72.6	46.9	34.7	29.4

BALANCE OF PAYMENTS

	<u>1969</u>	<u>1970</u>	<u>1971</u>
	(Millions US \$)		
Exports of Goods, NFS	1112.8	1341.0	1587.2
Imports of Goods, NFS	1902.6	2106.7	2514.7
Resource Gap (deficit = 1)	- 789.8	- 765.7	- 927.5
Interest Payments (net)	31.7	59.8	87.5
Other Factor Payments (net)	- 27.1	- 22.8	3.1
Net Transfer Receipts <sup>h/</sup>	139.5	93.6	105.6
Balance on Current Account	- 654.9	- 709.1	- 912.5
Direct Foreign Investment	15.9	38.0	55.8
Net MLT Borrowing	556.4	214.0	327.2
Disbursements	(665.0)	(417.0)	(553.0)
Amortization	(108.6)	(203.0)	(225.8)
Official Grants	106.3	86.6	65.0
Other Capital (net)	102.0	447.5	382.9
Increase in Reserves	- 121.6	- 60.8	68.5
All other items	- 4.1	- 16.2	13.1
Gross Reserves	553	610	568

MERCHANDISE EXPORTS (f.o.b.)  
(AVERAGE, 1969-71)

	(Millions US \$)	%
Clothing	226	26.8
Wood & Cork	101	12.0
Veneer Sheets & Plywood	98	11.6
Textiles	96	11.4
Wigs, etc.	77	9.1
Electric Machines & Equipment	49.7	5.8
Others	194.0	23.3
	841.7	100.0

EXTERNAL DEBT, DECEMBER 31, 1971:  
(Million US \$)

Public Debt (including undisbursed)	3021.8
Total Outstanding & Disbursed	2061.9

DEBT SERVICE RATIO (1971):

In % of Exports of Goods/Services 19.4

RATE OF EXCHANGE:

<u>December 31, 1971</u>	<u>June, 1972</u>
US \$1.00 = 370 Won	US \$ 1.00 = 400 Won
W 1.00 = \$.0027	W 1.00 = \$.0025

IBRD/IDA LENDING, APRIL 30, 1972:  
(Million US \$)

	<u>IBRD</u>	<u>IDA</u>
Outstanding & Disbursed	41	40
Undisbursed	154	21
Outstanding including Undisbursed	195	61

<sup>g/</sup> Wholesale Price Index.  
<sup>h/</sup> Excludes official grants.



KOREA - THE FOURTH RAILROAD PROJECT

LOAN AND PROJECT SUMMARY

Borrower: The Republic of Korea

Beneficiary: The Korean National Railroad (KNR)

Amount: US\$40 million equivalent

Terms: Payable in 25 years with 4 years grace at 7-1/4 percent interest per annum, through semi-annual installments beginning April 1, 1977 and ending October 1, 1997.

Relending Terms: The loan will be passed on to KNR on identical terms.

Project  
Description: KOREAN RAILWAY PROJECT

The project forms part of the KNR Investment Plan (1972-76). The proposed project includes: the completion of the already started electrification of industrial lines; electrification of KNR lines in the Seoul suburban areas as part of the rapid transit project for the Seoul Metropolitan area; construction of a new link from the second Incheon port to an existing railway line; installation of centralized traffic control in the Seoul area; improvement of marshalling yards and freight handling facilities; complete track and rail renewals; bridge strengthening; procurement of track maintenance and renewal equipment; purchase of passenger and freight cars; improvement of facilities for repair of motive power and rolling stock; and installation of some telecommunications facilities.

<u>Estimated Cost:</u>	<u>Component</u>	<u>(US\$ million)</u>		
		<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	1. New line construction	2.94	0.71	3.65
	2. Electrification			
	(a) Industrial lines electrification	9.93	13.82	23.75
	(b) Seoul suburban electrification	23.62	16.66	40.28

<u>Component</u>	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
3. Increase in station and line capacity			
(a) Signalling	9.83	6.35	16.18
(b) Double tracking of Ho Nam Line (25 km)	2.85	0.45	3.30
(c) Other works	13.77	1.65	15.42
4. Way and structure renewals and improvements	12.30	14.76	27.06
5. Motive power and rolling stock			
(a) Electric locomotives (66)	-	34.60	34.60
(b) Electric railcars (126)	-	18.41	18.41
(c) Freight cars (2,449)	10.74	13.35	24.09
(d) Passenger cars (271)	-	18.12	18.12
(e) Breakdown cranes	-	1.37	1.37
(f) Other	1.14	0.88	2.02
6. Motive power and rolling stock repair facilities	4.39	4.18	8.57
7. Miscellaneous	<u>7.37</u>	<u>2.85</u>	<u>10.22</u>
8. Total 1 to 7	98.88	148.16	247.04
9. Price contingencies	<u>9.35</u>	<u>8.37</u>	<u>17.72</u>
10. GRAND TOTAL	<u>108.23</u>	<u>156.53</u>	<u>264.76</u>

Financing Plan:

	<u>US \$ million</u>
Proposed Bank loan	40.0
Bank/IDA loan/credit (669/183-KO)	24.1
Consortium of European manufacturers (Belgium, France, Germany and Switzerland)	48.4
Japanese Yen credit	50.1
KfW (German)	5.4
KNR	14.9
Government	<u>81.9</u>
TOTAL	<u>264.8</u>

Estimated  
Disbursements:

US\$ million			
<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
18.7	17.3	3.9	0.1

Procurement  
Arrangements:

All items to be financed by the proposed loan would be acquired through international competitive bidding. Local firms would be in a position to bid for bridge girders (estimated at about US\$1.2 million) and possibly 209 ordinary passenger cars (estimated about US\$11.7 million).

Consultants:

- (i) Electrification of KNR lines in Seoul suburban areas.
- (ii) Improvement to telecommunications.
- (iii) Modernization of accounting system.

Rate of Return:

Economic rate of return is estimated at about 20 percent.

